

## ABSTRACT

Low volume safe for injection formulations of dantrolene yield significant advantages over the currently approved and marketed dantrolene for MH threatening anesthetic crisis. Once dantrolene can be made immediately available to patients triggered of MH, the anesthesiologist will be able to focus exclusively on the management of the patient's physiologic status in this complex and evolving crisis, not on the laborious and time consuming reconstitution process of the rescue agent. Additionally, a safe for injection low volume formulation of dantrolene can be made widely available to non-anesthesiologist practitioners who have occasion to use dantrolene intravenously in the treatment of other potentially life threatening conditions, including in the field. The low volume, safe for injection formulations of dantrolene, as well as other formulations of dantrolene, have significant advantages over currently used approaches to the prevention and treatment of pumphead, and other neurological, cognitive and motor dysfunction incident to iatrogenically or trauma induced situations of altered blood flow, including those incurred during surgical procedures involving CPB or related procedures, as well as those incurred during non-normothermic episodes caused iatrogenically or by disease.